

~~VOJENSKÉ JAF~~

Obstructive biliary syndrome in newborn & young infants. Cesk. pediat.  
8 no.6:504-509 5 July 58.

1. Detska klinika Palackeho university v Olomouci, prednosta doc.  
Dr. A. Mores.

(JAUNDICE, OBSTRUCTIVE, in inf. & child  
etiol., diag. & progn. in newborn & young inf. (Cz))

(INFANT, NEWBORN, dis.  
obstruct. jaundice, etiol., diag. & progn. (Cz))

VOLEJNIK, Jiri

The importance of acidophilus milk for prevention of nosocomial  
diarrheas. An attempt at clinical evaluation. Cesk pediat. 17 no.2:  
136-139 F '62.

1. Detska klinika fakulni nemocnice v Olomouci, zast. predn. dr.  
L. Pelikan.

(LACTOBACILLUS ACIDOPHILUS) (MILK nutrition & diet)  
(INFANT NUTRITION) (DIARRHEA in inf & child)

ZAJICEK, Mojmir; VOLEJNIK, Jiri

Diabetes insipidus renalis; report in 2 siblings. Cesk. pediat. 13 no.9:  
827-831 5 Oct 58.

1. Detska klinika Palackeho university v Olomouci, prednosta doc. Dr.  
Antonin Mores.

(DIABETES INSIPIDUS, case reports  
in siblings (Cz))  
(GLYCOSURIA, case reports  
same)

VOLEJNIK, Jiri

Rate of allergy in children. Cesk. pediat. 14 no.1:55-59 5 Jan 59.

1. Detska klinika Palackeho university v Oloumouci, prednosta doc.  
dr. A. Mores. J. V. Detska klinika, Olomouc.

(ECZEMA, in inf. & child  
case reports, follow-up (Cz))

(ASTHMA, in inf. & child  
same)

*Yellow 100*  
VOLEJNIK, Jiri, Dr.; ZAJICEK, Mojmir, Dr.

Glomerulonephritis during Henoch-Schonlein purpura. Cesk. pediat. 13  
no.2:108-110 Mar 58.

1. Detska klinika PU v Olomouci, prednosta doc. Dr A. Mores. J. V. detska  
klinika, Olomouc, trida I. P. Pavlova c. 26.

(PURPURA, MONTHROMBOFENIC, compl.

Schoenlein-Henoch synd., with glomerulonephritis (Cz))

(GLOMERULONEPHRITIS, etiol. & pathogen.

Schoenlein-Henoch purpura (Cz))

VOLEJNIK, Josef, inz. (Prague); VOSIJA, Otakar, inz. (Prague)

Analytic solution of compound curves. Geod kart obzor  
10 no. 3: 63-66 Mr '64.

PEDIATRICS

CZECHOSLOVAKIA

UDC 616.248-053.2;159.922.5

VOLEJNIK, J.; Pediatric Clinic, Medical Faculty, Palacky University (Detska Klinika Lekarske Fakulty PU), Olomouc, Head (Prednosta) Prof Dr J. LHOTAK.

"Psychological Factors in Bronchial Asthma in Children."

Prague, Casopis Lekarů Ceskych, Vol 105, No 31, 9 Aug 66, pp 842 - 844

Abstract [Author's English summary modified]: Psychological factors found during long-term investigations of children suffering from bronchial asthma or other dyspnoic conditions of an obstructive type are discussed. Neurosis develops in the children as a result of home conditions. Iatrogenic factors are discussed. 5 Western, 1 Czech reference. (Manuscript received Jan 66).

1/1

VOLEJNIK, Mirko, inz.

Size of farm water reservoirs. Vodni hosp 13 no.5:172-173 '63.

1. Statni ustav pro typizaci a vyvoj zemedelskych a lesnickych staveb, Praha.

VOLEJNIK, V.

Some notes from the Statistical Yearbook, 1958. p. 245.

TEXTIL. (Ministerstvo lehkeho prumyslu) Praha, Czechoslovakia,  
Vol. 14, no. 7, July 1959.

Monthly List of East European Accession (EEAI), LC Vol. 9, no. 2,  
Feb. 1960.

Uncl.

L 20488-66

ACCESSION NR: AP5020183

(A)

SOURCE CODE: CZ/0075/65/000/007/0245/0248

AUTHOR: Volejnik, V.

ORG: The Economic-Organizational Institute of the Wool Industry (Ekonomicko-organizačni ustav vlnarskeho prumyslu, Brno

TITLE: Quality in the light of yesterday and tomorrow

SOURCE: Textil, no. 7, 1965, 245-248

TOPIC TAGS: production engineering, control statistics

ABSTRACT: The article discusses the quality control of consumer goods, particularly in its most important development since the end of World War II, and calls special attention to what affects quality, quality and the monopoly position of the producer, especially as this prevails in Czechoslovakia, and to the trends in quality control and the organizations and agencies occupied with this problem in capitalist countries. The content of the concept of quality is dealt with in some detail and also the relation of quality to the economy, negative influences affecting quality, the producer and the consumer, and the prospects of quality in

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ACCESSION NR: AP5020183

consumer goods in the future. It is pointed out, among other things, that excessively high standards of quality are a drain on the economy and a waste. It is pointed out that in addition to the official documents in which the Central Committee of the Czechoslovak Communist Party deals with production quality defects and its decree Nr. 491/63 which calls for greater efforts to raise the quality of goods and to increase technical control of quality, a number of scientific workers from the Ministry of the Consumer Goods Industry production units, enterprises, and specialized subordinate organizations have been working on the problem of quality control. The importance attached to the problem in Czechoslovakia is underlined by the fact that B. Machacova-Dostalova (a woman), Minister of the Consumer Goods Industry, and Minister A. Rostlapi1, leader of a technical group, delivered the main addresses at the conference for the construction of model factories for better quality control in July, 1964, in Liberec.

SUB CODE: 13      SUBM DATE: none

Card 2/2 *LJC*

S/081/62/000/022/071/088  
B166/B144

AUTHORS: Kincl, Jaromir, Kosatik, Jaroslav, Volejnik, Vladislav

TITLE: Method of producing polycarbonates

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1962, 534-535,  
abstract 22P367 (Czech. patent, 97990, Jan. 15, 1961)

TEXT: Polycarbonates (PC) with molecular weight  $\leq 150,000$  (determined viscometrically), suitable for film and fiber production as well as for coatings, are synthesized in two stages. Initial dihydroxy compounds used are aliphatic, alicyclic and aromatic diols (mainly dihydroxy diphenyl alkanes); sulfones, sulfoxides, diphenol ethers and thioethers; dihydroxy diaryl alkanes having one or several H atoms in the aromatic ring substituted by a halogen or alkyl; dihydroxy diphenyl alkanes having the H atom in the alkylidene chain substituted by an aryl or alkyl (in the latter case the substituent affects the PC's tendency to crystallization). In the first stage the dihydroxy compounds are made to react with  $\text{COCl}_2$  in an alkaline medium at  $\sim 20^\circ\text{C}$  until a monochlorocarbonate is formed which, after neutralizing the excess alkali with  $\text{CO}_2$ , is separated by filtration, Card 1/3

Method of producing polycarbonates

S/081/62/000/022/071/088  
B166/B144

washed with water and dried. The second stage consists of polycondensation of the monochlorocarbonate (MCC) in the presence of 0.2 - 2 parts by weight HCl acceptors (tertiary nitrogenous bases such as pyridine) per 1 part by weight MCC; because of the high degree of purification in the production of the latter this reaction goes readily. The molecular weight of the PC can be controlled by changing the ratio of the -OH and -OCOCl groups in the MCC between 1 : 1 and 1 : 2 (preferably 1 : 1.05) by adding a calculated amount of a dihydroxy compound or its dichlorocarbonate; PC with a molecular weight 30,000 intended for coatings can be produced by adding a monatomic alcohol, e. g. cyclohexanol or oxydihydro nor-dicyclopentadiene (I), which renders the PC much more soluble in organic solvents. The advantage of this method of PC synthesis is that highmolecular polymers can be produced from commercially pure and from impure substances. Example. 228g (1 mole) commercially pure 2,2-(4,4'-dihydroxy-diphenyl) propane (II) are dissolved in 1142 g 7% aqueous NaOH solution (2 moles). 188 g (1.9 moles) COCl<sub>2</sub> are added to the solution at 25 - 35°C over a period of 2 hrs, at the same time adding 400 g 20% aqueous NaOH solution (2 moles). The mixture is

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Method of producing polycarbonates

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agitated at 30° for 1 hr, the excess NaOH being neutralized with CO<sub>2</sub>.  
To 100 g MCC, filtered off, washed with water and dried at 60°C, 7 g II  
are added, which brings the ratio of -OH and -OCOCl groups to 1 : 1.05.  
Then 150 g pyridine are poured in and the mixture is kept at 40°C for  
1 hr, then 1000 g CH<sub>2</sub>Cl<sub>2</sub> are added and the same temperature is maintained  
for a further 2 hrs. The PC are precipitated with C<sub>2</sub>H<sub>5</sub>OH; their  
molecular weight being 120,000 - 150,000. To get PC with a molecular  
weight 30,000 - 35,000 1 g I and 50 g pyridine are added to 100.g MCC.  
When the temperature rises spontaneously to 40°C, 150 g CH<sub>2</sub>Cl<sub>2</sub> are added  
and the mixture is stirred at this temperature for 2 hrs. The PC are  
precipitated with methanol. [Abstracter's note: Complete translation.]

Card 3/3

VOLEJNIK, V.

Scouring and drying plants for greasy wool. p. 384.

TEXTIL (Ministerstvo lehkého průmyslu)  
Praha, Czechoslovakia, Vol. 14, no. 10, Oct. 1959.

Monthly Hist of East European Accessions (EEAI), Vol. 9, no. 1, Jan. 1960

UNCL.

VOLEJNIK, Vladimir

Technology at the exhibition "Yesterday-Today-Tomorrow."  
Nova Technika no.7:310-314, '60.

ARASHKEVICH, V.M.; VOLEGOV, A.V.

Use of vibration sorting in the dressing of chrysotile  
asbestos ores. Izv.vys.ucheb.zav.; gor.zhur. no.7:  
134-138 '60. (MIRA 13:7)

1. Sverdlovskiy gornyy institut im. V.V.Vakhrusheva.  
Rekomendovana kafedroy obogashcheniya poleznykh iskopayemykh.  
(Ore dressing) (Vibrators)

S/130/60/000/010/007/009/XX  
A006/A001

AUTHORS: Benyakovskiy, M. A., Volegov, V. P.

TITLE: Reduction Conditions and Roller Profiles in Continuous Tin Rolling

PERIODICAL: Metallurg, 1960, No. 10, pp. 22-23

TEXT: The authors discuss a method suggested by M. A. Leychenko in Metallurg # 4, 1960, who proposed to stretch the strip edges more than its middle portion on the 3rd, 4th and 5th stands in the rolling process. For this purpose he recommended to produce a strip with a bi-concave contour on the first and second stand and to conduct the rolling process on the following stands in rollers with cylinder-profiled barrels. The authors hold that the method suggested by Leychenko is not based on the uniform stretching of the metal throughout the strip width on each stand and therefore cannot be used in tin plate rolling. Moreover, Leychenko did not give any indications as to the thermal conditions of the roller operation although the increased difference in temperature between the middle portion and the edges of 500-mm-diameter operating rollers is 2°C and that of 133-mm-diameter supporting rollers is 1°C, which fact would entail a total increase of concavity of the whole roller system by

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S/130/60/000/010/007/009/XX  
A006/A001

Reduction Conditions and Roller Profiles in Continuous Tin Rolling

0.04 mm. There are also recommendations missing on the magnitude of rolling forces determining the metal deformation and, consequently, the contour of rollers during rolling process. The distribution of reduction over the stands suggested by Leychenko was taken from foreign practice and had no connection with the initial contour of rollers or roller profiles during rolling process. The data submitted (Table 1) are not typical for foreign mills. The authors say that the reduction conditions and the initial contour of rollers when rolling thin sheets must be determined from the correlation and the temperature conditions of rollers, metal pressure on them, the difference in the transverse strip thickness etc. The correlation of those technological parameters must be based on the uniform reduction of the strip across the width, i. e. on a uniform reduction of the middle portion and the edges. The Ural'skiy institut chernykh metallov, considering the aforementioned deformation conditions, developed in 1958 a reduction technology and roller contours for rolling tin plate on a five-high 1200 mill at the Magnitogorsk Metallurgical Combine. As a result rejects due to warping were reduced by a factor of 2 and rupture of the strip due to non-uniform stretching was eliminated. The technology developed is given in Table 2.

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S/130/60/000/010/007/009/XX  
A006/A001

Reduction Conditions and Roller Profiles in Continuous Tin Rolling

Table 2. Reduction conditions developed by UIChM for tin plate rolling

Number of stand	Metal thickness mm		Reduction during one pass		Total reduction %	Initial con-cavity of the upper operating roller barrel, mm	Temperature difference of the center and edges of the barrel, °C		Rolling force, t
	Prior to the pass	After the pass	mm	%			operat-ing roller	support-ing roller	
1	2.2	1.6	0.6	27	27.0	0.09	0	0	600
2	1.6	1.07	0.53	33	51.3	0.10	5	2	760
3	1.07	0.62	0.45	42	72.0	0.10	10	4	910
4	0.62	0.42	0.20	33	81.0	0.10	7	3	725
5	0.42	0.28	0.14	33	87.3	0.14	7	3	800
1	2.2	1.58	0.62	28	28.0	0.10	0	0	620
2	1.58	1.02	0.56	35	53.5	0.10	6	2	800
3	1.02	0.58	0.44	43	73.6	0.10	11	4	935
4	0.58	0.39	0.19	33	82.2	0.10	8	3	750
5	0.39	0.25	0.14	33	88.7	0.14	8	3	825

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S/130/60/000/010/007/009/XX  
A006/A001

Reduction Conditions and Roller Profiles in Continuous Tin Rolling

Remark: The lower operating rollers are cylindrical.  
There are 2 tables.

ASSOCIATION: Ural'skiy institut chernykh metallov (Ural Institute of Ferrous Metals)

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S/137/60/000/010/012/040  
A006/A001

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No. 10, p. 114,  
# 23313

AUTHORS: Benyakovskiy, M.A., Volegov, V.P.

TITLE: The Forward Flow on Continuous Cold Rolling Mills

PERIODICAL: Byul. nauchno-tekhn. inform. Ural'skiy n.-i. in-t chern. metallov,  
1959, No. 6, pp. 73 - 76

TEXT: The imprint method was used to study the forward flow when rolling  
600 mm wide strips from 3.0 to 1.6 and from 1.6 to 0.5 mm on a continuous three-  
stand four-high mill with 520-mm-diameter working rolls.

L.M.

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

VOLEJNIK, J.; MALOTA, H.

Frontal sinusitis in allergic respiratory syndrome in children.  
Cesk.pediat.15 no.6/7:631-635 J1'60.

- I. Detska klinika v Olomouci, prednosta doc.dr.Antonin Mores.
- II. interni klinika v Olomouci, ujednosta doc.dr. Z.Kojecky.  
(ASTHMA in inf & child)  
(FRONTAL SINUSES dis)  
(SINUSITIS in inf & child)

EHMANN, J.; VOLEJNIK, V. dr.

Exchange center of improvement suggestions in Most. Uhli 5 no.7:  
252 JI '63.

1. Sdruzeni Severoceskych hnedouhelnych dolu, Most.

L 9934-66 EWT(m)/EWP(j) JW/RM

ACC NR: AP6003385

SOURCE CODE: CZ/0043/65/000/007/0559/0569

AUTHOR: Singliar, Michal - Shingliar, M. (Engineer); Volek, Imrich (Engineer);  
Sestrienkova, Marta - Sestriyenkova, M. (Engineer)

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B

ORG: Petrochemical Research Institute, Novaky (Vyskumny ustav pre petrochemiu)

TITLE: Identification of alcohols found in an octanol fraction, prepared by  
aldolization of crotonaldehyde

SOURCE: Chemicke Zvesti, no. 7, 1965, 559-569

TOPIC TAGS: alcohol, quantitative analysis, aldehyde, gas chromatography, ir  
spectroscopy, hydrogenation

ABSTRACT: The alcohols investigated had a chain of 4 to 8 carbons. The identification of individual fractions was made by means of chemical analysis, gas chromatography, infrared spectroscopy, and by hydrogenation. A table showing elution periods for various aromatic chain alcohols and acid was prepared. The study was undertaken to determine if it was possible to prepare linear chain alcohols by crotonaldehyde condensation, and by hydrogenation of the resulting aldols. The reaction mixture was separated into individual fractions in a rectification column before the analysis was made. It was found by means of gas chromatography that the fraction C sub 8 - C sub 12 had many components. The conditions for favoring the straight chain alcohols production are discussed.

Orig. art. has: 6 figures and 4 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 27Feb65 / ORIG REF: 003 / OTH REF: 041 / SOV REF: 004

Card 1/1

CZECHOSLOVAKIA

DVORAK, Josef, MD, Lt Col; and VOLEK, JOsef,MD, Lt Col; Institute for Aviation Medicine, Prague.

"Report from the Eleventh European Congress of Aviation and Space Medicine, October 8-12 1962 in Madrid."

Prague, Vojenske zdravotnicke listy, Vol 32, No 2, Apr 63; pp 94-96.

Abstract : Detailed report of about a dozen presentations by NATO, Air France and other staff members at this meeting.

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CZECHOSLOVAKIA

DVORAK, Josef, MD, Lt Col; and VOLEK, JOsef, MD, Lt Col; Institute for Aviation Medicine, Prague.

"Report from the Eleventh European Congress of Aviation and Space Medicine, October 8-12 1962 in Madrid."

Prague, Vojenske zdravotnicke listy, Vol 32, No 2, Apr 63; pp 94-96.

Abstract : Detailed report of about a dozen presentations by NATO, Air France and other staff members at this meeting.

1/1

- 20 -

CZECHOSLOVAKIA

VOLEK, Josef, MD, Lt Col, Institute of Aviation Medicine (Ustav leteckeho zdravotnictvi,) Prague.

"Effect of Flight Duty on the Spine."

Prague, Vojenske zdravotnicke listy, Vol 32, No 2, Apr 63; pp 53-56.

Abstract [English summary modified]: Study in an unstated number of aviation cadets, pilots and paratroopers revealed that pilots and paratroopers are more liable to spinal weakening and spinal diseases in general are therefore to be among potentially service-connected disabilities. Analogously, any relatively minor spinal anomaly should be considered as a tentative contraindication to flying duty when selecting aviation cadets. Table.

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L 35377-66

ACC NR: AP6026849

SOURCE CODE: CZ/0060/66/000/002/0072/0074

AUTHOR: ~~Skochil, Vladimir~~—Skochil, V. (Lieutenant colonel; Doctor of medicine);  
~~Volek, Jiri~~—Volek, Y. (Lieutenant colonel; Doctor of medicine); ~~Svejnoha, Jiri~~—  
Shveynoga, Y. (Captain; Doctor of medicine)

ORG: none

TITLE: Epidemic of streptococcal anginas of alimentary origin at a military unit

SOURCE: Vojenske zdravotnicke listy, no. 2, 1966, 72-74

TOPIC TAGS: army medicine, bacterial disease

ABSTRACT: At a military unit 62.4% of the soldiers who were getting their food from the same kitchen became ill within 5 days. The total number of afflicted soldiers was 475, and all were affected by a beta-hemolytic streptococcus of the group A type 3/27. It was discovered that the infection carrier was a cook who suffered from a suppurative finger. The streptococcus multiplied in the medium of an egg-spread. The cook himself became sick with the infection, as his body had no time to produce protective antibodies. Orig. art. has: 1 figure and 5 tables. [JPRS: 36,834]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 006 / OTH REF: 003

Card

1/1

Pdh

UDC: 616.322-002-022.21.214-036.22-032/61.37: 356.33

MACIK, Ivo; VOLEK, Milan

New plastic bandages with acrylate bases. Acta chir. orhop. traum.  
cech. 28 no.5:397-398 0 '61.

1. Vyzkumny ustav traumatologicky v Brne, reditel prof. MUDr. Vladimír  
Novak, doktor lek. ved Nar. podnik Dental, Praha-Strasnice, reditel  
inz. Pav.

(BANDAGES) (ACRYLIC RESINS)

BRABEC, V.; BIGANOVA, J.; FRIEDMANN, B.; KCUT, M.; MIRCEVOVA, L.;  
PALEK, J.; VOPATOVA, M.; VOLEK, V.

Metabolic changes of erythrocytes in autoimmune hemolytic  
disease. Cas. lek. cesk. 104 no.22:604-605 4 Je '65.

1. Ustav hematologie a krevni transfuze v Praze (reditel:  
prof. dr. J. Horejsi, DrSc.) a I. interni klinika fakulty vse-  
obecneho lekarstvi Karlovy University v Praze (prednosta prof.  
dr. V. Hoenig, DrSc.).

VOLEK, V.

Importance of enzymes in clinical medicine. Cas.lek.cesk.  
103 no.7:25-34 14 F'64

I. I.interni klinika fakulty vseobecneho lekarstvi KU v  
Praze; prednosta: prof.dr. V.Hoenig. DrSc.

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RONSKY, R.; PROCHAZKA, B.; VOLEK, V.; Technicka spoluprace: BARTA, V.;  
SLAISOVA, X.; PAPEZOVA, R.

Value of the determination of some enzymes in differential  
diagnosis of exudates. Sborn. lek. 67 no.10:290-293 0 '65.

1. I. interni klinika (prednosta prof. dr. V. Hoenig, DrSc.)  
a IV. interni klinika (prednosta prof. dr. M. Fucik) fakulty  
vseobecneho lekarstvi University Karlovy v Praze.

BIELICKY, T.; VOLEK, V.

On the problem of the role of the liver in the pathogenesis of chronic polymorphous photodermatosis. *Cesk. derm.* 38 no.3: 217-220 Je '63.

1. Dermato-venerologicka klinika lekarske fakulty hygienicke KU v Praze, prednosta doc. dr. F. Bielicky, CSc. I interni klinika fakulty vseobecneho lekarstvi KU v Praze, prednosta prof. dr. V. Hoenig, DSc.

(LIVER FUNCTION) (PHOTOSENSITIZATION)  
(GAMMA GLOBULIN)

VOLEK, V. DINESTBIER, Z.

Lactic acid dehydrogenase in the blood serum after irradiation.  
Med.rad. 5 no.6:39-42 '60. (MIRA 13:12)  
(LACTIC DEHYDROGENASE) (RADIATION)

CZECHOSLOVAKIA

UDC 616.153(577.158.42.084)-074-035.1

VOLEK, V.; PALEK, J.; 1st Internal Clinic, Faculty of General  
Medicine, Charles University (I. Interni Klinika Fakulty Vseo-  
becneho Lekarstvi KU), Prague, Chief (Prednosta) Prof Dr V.  
HOENIG.

"On the Clinical Application of Dehydrogenase Glucose-6-Phosphate."

Prague, Casopis Lekarů Ceskych, Vol 105, No 49-50, 9 Dec 66, pp  
1381 - 1383

Abstract [Authors' English summary modified]: Activity of the  
glucose-6-phosphate dehydrogenase enzyme was investigated in  
some hematological affections; it seems possible to evaluate  
the age structure of the blood cells and assess the effective  
erythropoietic activity of the bone marrow on the basis of activ-  
ity of the enzyme. In some diseases (renal insufficiency, liver  
cirrhosis, diabetes, psoriasis) no effect on the enzyme activity  
could be determined. In decompensated diabetes this enzyme frequent-  
ly shows low activity. 4 Figures, 6 Western, 6 Czech, 1 East  
German reference.

1/1

VOLEK, Vit; POGORIELOV, Oleg

Warning light signal with automatic barrier on nonelectric  
railroad lines. Zel dop tech 12 no.11:294-297 '64.

GREGOR, Ota; VOLEK, Vladimir; VOŠLÁROVA, Zdenka

Screening for anacid states as precancerous conditions of the stomach. Cas.lek.cesk. 99 no.7/8:212-213 19 P.'60.

1. I. int. klinika KU v Praze, prednosta prof.dr. M. Netousek.  
(STOMACH NEOPLASMS diag.)  
(ACHYLIA GASTRICA diag.)

VOLEJNIK, V.

National congress of technicians in the textile industry. p. 5.

(Textil. Vol. 12, no. 1, Jan. 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EFAL) LC, Vol. 6, no. 10, October 1957. Uncl.

VOLEK, V.; GREGOR, O.; Technická spolupráce: PAPEZOVÁ, R.

Gastric lactate dehydrogenase in achlorhydria. Contribution to the early diagnosis of stomach cancer. Cesk. gastroent. vyz. 17 no.5:266-270 JI '63.

I. I interní klinika fakulty všeobecného lékařství KU v Praze, přednosta prof. dr. V. Hoening, DrSc.

(ACHLORHYDRIA) (LACTATE DEHYDROGENASE)  
(STOMACH NEOPLASMS) (ANEMIA, PERNICIOUS)  
(NEOPLASM DIAGNOSIS)

VOLEJNIK, V.

Production of tufted carpets. p. 88.

(Textil. Vol. 12, no. 3, Mar. 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

VOLEVAKHA, M.M.

Signs of the weather. Nauka i zhyt'tia 8 no.8:46-48 Ag '58,  
(MIRA 12:1)

(Weather lore)

YUGOSLAVIA/Chemical Technology. Chemical Products and Their      H  
Application, Part 4. - Cellulose and Its Derivatives.  
Paper.

Abs Jour: Referat. Zhurnal Khimiya, No 21, 1958, 72625.

Author : Ivan Volek.

Inst : \_\_\_\_\_

Title : Upon the Structure of Cellulose Fibers.

Orig Pub: Kemijska u industriji, 1956, 5, No 8, 173-176.

Abstract: No abstract.

Card : 1/1

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YUGOSLAVIA / Chemical Technology. Chemical Products. H  
Products of Wood Chemistry. Hydrolysis. Industry.

Abs Jour: Ref Zhur-Khimiya, 1958, No 20, 68788.

Author : ~~Volek I.~~  
Inst : Not given.  
Title : Chemical Composition of Wood Pulp.

Orig Pub: Kemija u industriji, 1956, 5, No 11, 293-296.

Abstract: No abstract.

Card 1/1

VOLEK, L.

GEOGRAPHY & GEOLOGY

Periodicals: KRASY SLOVENSKA. Vol. 34, No. 1, 1957.

VOLEK, L. The Turdus Skilift. p. 7.

Monthly List of East European Accessions (EEAI) LC Vol. 8, No. 4, April 1959,  
Unclass.

VOLEK, V.; DIENSTBIER, Zd.; technicka spoluprace: STACHOVA, M.; PAPEZOVA, R.;  
CERNOVSKA, M.; LOJKOVA, M.

Effect of radiations on the level of serum lactic dehydrogenase in  
the rat. Acta univ. carol. [med.] Suppl. 14:103-110 '61.

1. I. interni klinika fakulty vseobecneho lekarstvi University Karlovy  
v Praze, prednosta prof. dr. V. Hoenig Biofysikalni ustav fakulty  
vseobecneho lekarstvi University Karlovy v Praze, prednosta doc. dr.  
Z. Dienstbier.

(LACTIC DEHYDROGENASE blood) (RADIATION INJURY exper)

CZECHOSLOVAKIA

STORK, A., KUCEROVA, L., and VOLEK, V., with technical cooperation of PAPEZOVA, R., of the First Clinic of Internal Medicine (I. interní klinika), Faculty of General Medicine (Fakulta všeobecného lékařství), Charles University, Prague, Prof V. HOENIG, MD, director.

"Effect of Heparin on the Activity of Serum Transaminases"

Prague, Casopis Lékaru Českych, Vol CII, No 17, 26 April 63, pp 441-444.

Abstract [Authors' English summary]: The activity of SGOT and SGPT before and after intravenous injection of heparin was studied in 40 subjects. Out of this number eight subjects served as a control group, eleven suffered from glomerulonephritis, four from diabetes, five from idiopathic hyperlipaemia, and twelve from hepatic disease. No significant change in the activity of these enzymes could be observed in any of the patients. An apparent increase of SGOT and SGPT activity in two patients suffering from idiopathic hyperlipaemia was caused by increased turbidity of the reacting mixture during incubation. Twenty-one  
1/1 references, including nine Czech.

VOLEK, V. ; DIENSTBIER, Z.

Lactic dehydrogenase after irradiation. Cas.lek.cesk. 99 no.7/8:  
263-267 19 F '60.

1. Technicka spoluprace M. Stachova, R. Papezova, M. Cernovska,  
M. Lojkova. Vyzkumna laborator pro patofyziologii krvetvorby a  
jater v Praze, reditel prof. MUDr. Milos Netousek. Biofyzikalni  
ustav fakulty vseobecneho lekarstvi KU v Praze, zastupce prednosty  
doc. MUDr. Z. Dienstbier.

(DEHYDROGENASES metab.)

(RADIATION EFFECTS exper.)

VOLEK, Vladimir; ENOLIS, Miroslav

Enzymatic aspects of temporary post-irradiation changes. Cas.  
lek.cesk.99 no.37:197-203 9 S'60.

I. I. interni klinika fakulty vseobecneho lekarstvi KU v Praze,  
prednosta prof. MUDr. V.Hoenig. Laborator pro patofyziologii  
krvetvorby a jater, reditel prof. MUDr. V.Hoenig. Katedra lekarske  
fyziky a nuklearni mediciny, vedouci doc. MUDr. Z.Dienstbier.  
(RADIATION EFFECTS)  
(ENZYMES metah)

ČESKOSLOVÁKIA JDC 676.155.194.17:616.155.194.7):415.155.1-005.9  
(577.155.42.034)

PALEK, J.; VOLEK, V.; FRIEDMANN, B.; BRABEC, V.; 1st Internal Clinic Fac. of Gen. Med. Charles Univ. (I. Int. Klinika Pak. Vscob. Lek. KU), Prague, Head (Prednosta) Prof Dr V. HOENIG; Institute of Hematology and Blood Transfusions (Ustav Hematologie a Krevni Transfuze), Prague, Director (Reditel) Prof Dr J. HOREJSI.

"Glucose-6-Phosphate Dehydrogenase Activity of Red Blood Cells in Hemolytic Conditions and Refractory Anemias."

Prague, Casopis Lekarů Ceskych, Vol 105, No 29, 8 Jul 66, pp 775 - 780

Abstract [Authors' English summary modified]: The activity of the glucose-6-phosphate dehydrogenase is raised in autoimmune hemolytic anemia, in congenital spherocytosis, and in most patients suffering from paroxysmal nocturnal hemoglobinuria. It is normal or slightly higher in refractory anemia with hyperplastic bone marrow, and normal or reduced with hypo- or aplastic marrow. The rise in enzyme activity is correlated to the severity of anemia with the exception of paroxysmal nocturnal hemoglobinuria and anemia with hypo- or aplastic marrow. 12 Figures, 15 Western, 5 Czech, 2 East German references  
1/1

TIMOVA, B.; FEDOVA, D.; BOSKOVA, D.; VOLENIKOVA, J.; PROCHAZKOVA, V.;  
LUDVIK, J.

The incidence and spread of a new variant of type B influenza virus in the population of Czechoslovakia in 1959--1961. II. Properties of the strains isolated. Acta virol. 7 no. 2:156-175 Mr '63.

1. Czechoslovak Influenza Centre, Institute of Epidemiology and Microbiology, Prague, and Laboratory of Electron Microscopy and Experimental Morphology, Czechoslovak Academy of Sciences, Prague.  
(INFLUENZA VIRUSES) (VIRUS CULTIVATION) (GUINEA PIGS)  
(CATTLE) (SHEEP) (INFLUENZA) (MICE) (EPIDEMIOLOGY)  
(HORSES) (RABBITS) (CARNIVORA) (TISSUE CULTURE)  
(HEMAGGLUTINATION INHIBITION TESTS) (COMPLEMENT FIXATION)  
(ANTIGENS) (COMPLEMENT FIXATION TESTS) (NEUTRALIZATION TESTS)

NAVRATIL, Jaroslav, inz; VOLENIK, Vlastimil, inz.

Simple band-pass filter suppressing adjacent frequencies.  
Sdel tech ll no.9:330-331 S '63.

VOLEK, V.; DIENSTBIER, Z.

Changes in the serum transaminase after total body irradiation.  
Neoplasma, Bratisl. 8 no.1:40-44 '61.

1. I. Medical Clinic, Faculty of General Medicine, Biophysical  
Institute of the Faculty of General Medicine, Charles University,  
Prague, Czechoslovakia.

(RADIATION INJURY blood)  
(TRANSAMINASES blood)

VLEK, V.  
DUB, O.; VOLHK, V.; JAGOS, V.

Non-specific eosinophil curve in adrenalin test. Cas. lek. cesk. 90  
no.51-52:1509-1516 28 Dec 51. (CLML 21:5)

1. Of the Internal Department and Central Laboratory of State Regional  
Hospital, Liberec.

2

CZECHOSLOVAKIA

VOLEK, V; BERMAN, J.

First Clinic of Internal Diseases (I. klinika chorob  
vnitřních), Prague (for both)

Brno, Vnitřní lékařství, No 5, 1963, pp 438-440

"Lactic Dehydrogenase in Porphyric Disease."

STONK, A.; KUCEROVA, L.; VOLEK, V.; technicka spoluprace PAPEZOVA, R.

Effect of heparin on the activity of serum transaminases. Cas. lek.  
cesk. 102 no.17:441-444 26 Ap '63.

1. I. interni klinika fakulty vseobecneho lekarstvi KU v Praze,  
prednosta prof. dr. V. Hoenig.

(HEPARIN) (PHARMACOLOGY) (ALANINE AMINOTRANSFERASE)  
(ASPARTATE AMINOTRANSFERASE) (BLOOD CHEMICAL ANALYSIS)  
(GLOMERULONEPHRITIS)

VOJENIK, Karel; VANICEK, Oldrich

A contribution to the structure of oxide layers on steel.  
Cs cas fys 14 no.6:548-551 '64.

1. State Research Institute of Material Protection, Prague.

L 18503-66 T DJ

ACC NR: AP6010249

SOURCE CODE: CZ/0034/65/000/003/0178/0180

AUTHOR: Volenik, Jiri (Engineer)

ORG: V.I. Lenin Factories, Plzen (Zavody) ||

22  
8

TITLE: Tension measurements on continous rolling trains

SOURCE: Hutnicka listy, no. 3, 1965, 178-180

TOPIC TAGS: rolling mill, fabricated structural metal

ABSTRACT: The size of the rolled product is influenced by the tension between the rolling stands. Some rolling mill engines are often overloaded. Methods of tension measurements are described; the direct method for rods and strips, and the indirect method used for billets and sections. Indirect methods used are compared to each other. The method of computing the tension from the driving gear capacities is described. Measurement of strain work per unit volume, devising a computation algorithm for a simple computer is discussed. Accuracy of the method is

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L 18503-66  
ACC NR: AP6010249

evaluated. The method determines the total tensile force between  
the rolling stands, and not only the tension in the material.  
Orig. art. has: 2 figures and 12 formulas. [JPRS]

SUB CODE: 13 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 001  
SOV REF: 002

Card 2/2

UDC: 531.73: 621.941.5

18 8300

30593  
Z/032/61/011/011/002/005  
E112/E535

AUTHORS: Vlasáková, L., Volrábová, H. and Veleník, K.  
TITLE: Initial stages of steel corrosion at elevated temperatures

PERIODICAL: Strojirenství, v.11, no.11, 1961, 843-847

TEXT: The present paper is based on the theory of Cabrera and Mott (Ref.1: Rec.Progr. in Phys. 12, p.165) which proposes that for each metal and set of conditions there is a critical temperature at which a transition between two types of corrosion mechanisms can be observed. Above the critical temperature, the main factor affecting corrosion is diffusion of metal cations to the surface of the metal. The rate of oxidation can be expressed by the parabolic law:  $x^2 = kt + a$ , (1)

where  $x$  - thickness of layer,  $t$  - time, and  $k$  and  $a$  are constants. Therefore, a corrosion process which obeys the parabolic law will proceed without reaching a maximum and the layer thickness will increase with time. On the other hand, the corrosion mechanism below the critical temperature is determined by an

Card 1/5

30593

Initial stages of steel corrosion ... //032/61/011/011/0017001  
E112/E535

electric double layer and is characterized by a fairly rapid initial growth of the layer, soon reaching a maximum limiting thickness. The limiting thickness is an inverse function of absolute temperature  $T$ , and can be represented graphically as a straight line, intersecting the abscissa at the critical temperature  $T_k$ . Determination of limiting thickness at various temperatures and extrapolation of the plots of inverse thickness against  $T$  will produce the critical temperature  $T_k$  at which the growth of the corrosion layer, affected merely by the electric double layer, will reach its maximum. Beyond the critical temperature corrosion will proceed by the ionic diffusion mechanism, without ever reaching a maximum. Therefore, determination of the critical temperature is based on an accurate measurement of the layer thickness at different temperatures and atmospheric conditions. A novel optical method is now described which permits the determination of layer thickness within an accuracy of a few  $\text{\AA}$ . It is based on previous work of A. Vařiček (Ref. 4: *Čs. Čas. fys.*, 4, p. 73) dealing with changes of the ellipticity of polarized light on being reflected from the surface of the studied objects. The layer thickness is computed from changes of ellipticity and the refractive indices

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Initial stages of steel corrosion ... 30593  
Z/032/61/011/011/002/005  
E112/E535

of the metal and its oxide. The thickness of corrosion layers at the initial stages of corrosion at relatively low temperatures ranges from a few tens to a few hundreds of Å, and conventional methods have been found inadequate to measure the course of oxidation. The optical method permits following the growth of the corrosion layers with great accuracy from a knowledge of the optical constants of the material and ellipticity changes of polarized light. On the basis of the test results the critical temperatures of steels with varying amounts of B are tabulated. They range from 217°C for the Czech constructional steel 13 030 to 277°C for steels with very high (10%) B contents. Furthermore, the thickness of layers are plotted against corrosion times at different temperatures for seven different types of steel (Abcissa - time of oxidation, in hours; axis 4 thickness of layer, in Å). The new method permits examining the corrosion resistance of steel constructional materials in 60-80 hours, whereas conventional procedures require 500 to 1000 hours and produce only subjective evaluations. The method is recommended by the authors as a standard test. There are 11 figures, 2 tables and 6 references: ✓

Card 3/5

Initial stages of steel corrosion ... <sup>30593</sup> Z/032/61/011/011/002/005  
E112/E535

4 Soviet-bloc and 2 non-Soviet-bloc. The English-language references read as follows: Ref.1 (quoted in test), Ref.6: Vernon, W.H.J., Calnan, E.A., Clews, C.J.B., Nurse, T.J., 1953, Proc.Roy. Soc.(A) 216, p.375.

ASSOCIATION: Státní výzkumný ústav ochrany materiálu, Praha (State Research Institute for the Protection of Materials, Prague)

Fig.7.  
(With 0.35% B)

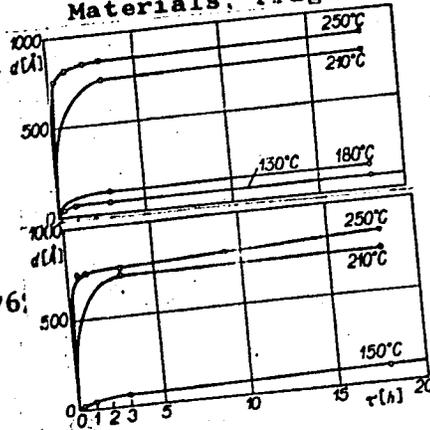
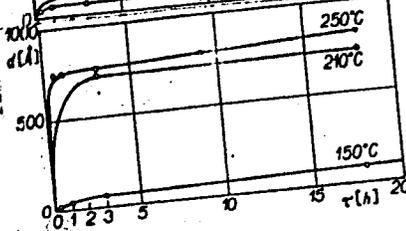


Fig.8.  
(With 0.76% B)



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Fig.9  
(With 6% B)

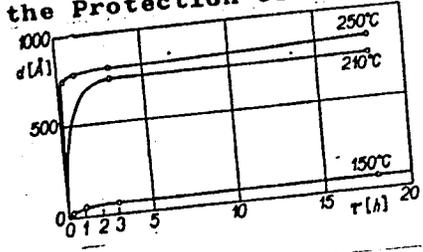
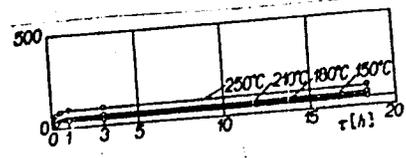


Fig.10  
(With 10% B)



Initial stages of steel corrosion ... 30593  
Z/032/61/011/011/002/005  
E112/E535

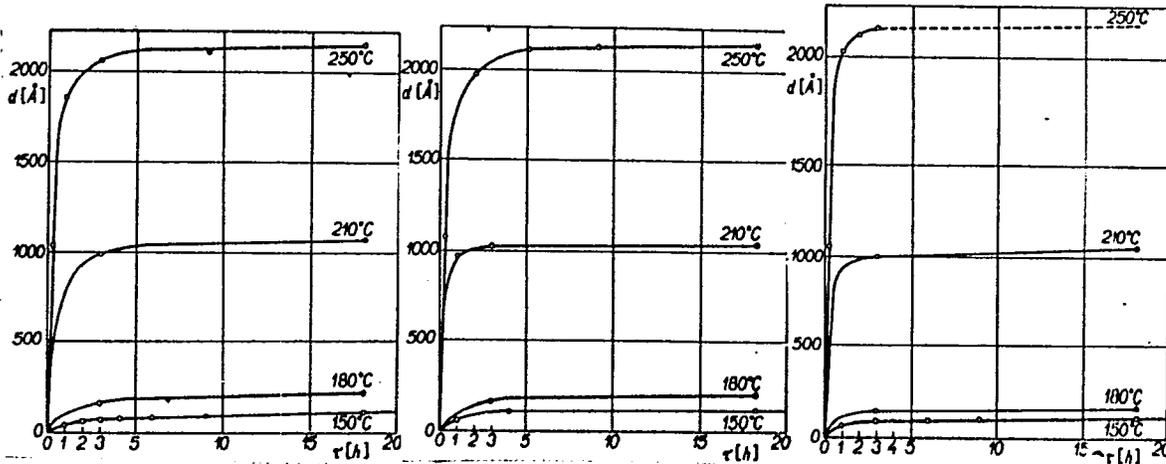


Fig. 3. Steel 13 030. Fig. 4. Steel 12 022 Fig. 5. Steel 15 110

Card 5/5

CZECHOSLOVAKIA

TUKOVA, B; FIEDOVA, D; FLESNEK, J; SUCHANEK, M; LUDVIX, J;  
BOSKOVA, D; VOLENIKOVA, J; PROCHAZKOVA, V.

Prague, Prakticky lekar, No 16, 1963, p 627

"Occurrence and Spread of Variants of the Flu Virus Type  
B in the Czechoslovak Population between 1959-1961."

( 8 )



VOLFNIK, Jiri. inz.

Drive with controlled silicon rectifiers. Elektrotechnik 19  
no.5:147 My '64.

VOLENK, K.; VLASAKOVA, L.; VELRABOVA, Ye.; LASHTOVKOVA, O.

Using krypton adsorption to measure surface dimensions of commercial grade metals. Zashch. met. 1 no.5:565-573 9-0 '65. (MIRA 18:9)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut zashchity materialov imeni G.V.Akimova, Chexhoslovatskaya Sotsialisticheskaya Respublika, Praga.

L 1643-66 EPF(c)/EWP(i)/EWP(t)/EWP(b) : IJP(c) JD/WB

CZ/0037/64/000/006/0548/0551

ACCESSION NR: AP5024325

AUTHOR: Volanik, Karel; Vanicek, Oldrich

22  
B

TITLE: Contribution to the structure of oxide layers on steel

SOURCE: Ceskoslovensky casopis pro fysiku, no. 6, 1964, 548-551

TOPIC TAGS: steel, metal oxidation, oxide formation

ABSTRACT: Reported are results of a research concerning some properties, including the structure of oxide layers, originating at temperatures up to 400 degrees centigrade on a cold-rolled steel strip. Three oxidation stages were found and described. Orig. art. has: 4 figures.

ASSOCIATION: Statni vyzkumny ustav ochrany materialu, Prague (State Research Institute for the Protection of Materials)

SUBMITTED: 11Jun64

ENCL: 00

SUB CODE: IMI

NR REF SOV: 002

OTHER: 005

JPRS

Card 1/1

VOLENJINK, V.

Scouring and drying lines for wool. (To be contd.) p. 339

TESTIL (Ministerstvo lehkeho prumyslu)  
Praha, Czechoslovakia, Vol. 14, no. 9, Sept. 1959.

Monthly List of East European Accessions (EEAI), Vol. 9, no. 1, Jan. 1960

Uncl.

VOLENKO, B.

The control became more effective. Fin.SSSR. 20 no.11:52-54  
N '59. (MIRA 12:12)

1. Upravlyayushchiy Luganskoy kontoroy Stroybanka.  
(Lugansk Province--Banks and banking)  
(Housing--Finance)

VOLENKO, B.

Payment

Regulating accounts between clients and contractors. Sov fin. 12 No 2 1952

MONTHLY LIST OF RUSSIAN ACCESSIONS, LIBRARY OF CONGRESS, APRIL 1952, UNCLASSIFIED.

VOLENKO, B.

Against fund dispersion. Fin. SSSR 37 no.7:74-76 J1 '63.  
(MIRA 16:8)

1. Upravlyayushchiy Luganskoy oblastnoy kontoroy Stroybanka.  
(Lugansk Province--Construction industry--Auditing and inspection)  
(Lugansk Province--Banks and banking)

VOLENS, N. V.

VOLENS, N. V. Ocherk khoziazistvennogo stroia Iakutii. (In Vittenburg, P.V., ed. Iakutia; sbornik statei. Leningrad, Akademiia Nauk SSSR, 1927, p. 675-702.)  
DLC: DK771.12W8

CSt      CSt-H      CtY      ICU      MIU      NN

SO: IC, Soviet Geography, Part I<sup>I</sup>, 1951/Unclassified

VOL'-EPSHTEYN, A.B.; KRICHKO, A.A.

Production of aromatic hydrocarbons from tar obtained in the pyrolysis  
of hydrocarbon gases. Khim.i tekhn.topl.i masel 6 no.3:14-18 Mr '61.  
(MIRA 14:3)

1. Institut goryuchikh iskapayemykh im. G.M. Krzhizhanovskogo AN SSSR.  
(Hydrocarbons)

YULIN, M.K.; VOL'NESHTEYN, A.B.

Refining liquid alkyl phenols from the production of p-tert-butyl phenol. Neftoper. i neftekhim. no.1:31-33 '65.

(MIRA 18:6)

1. Institut goryuchikh iskopayemykh, Moskva.

VOL'-EPSHTEYN, A.B.; ZAMANOV, V.V.; KRICHKO, A.A.; TITOVA, T.A.; CHERNYI, I.R.

Obtaining benzene by the hydrogenation of the products of fuel  
pyrolysis. Khim. prom. 41 no.5:325-329 My '65. (MIRA 18:6)

V. EPSTEIN A. R.

catalysts were practically equiv. for steam hydrogenation.  
... ..

VOL-EPSTEYN, A.P.

Vol'-Epshteyn, A. B.

AID P - 2262

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 7/19

Authors : Lozovoy, A. V, S. A. Senyavin and A. B. Vol'-Epshteyn

Title : Activity of certain hydrogenation catalysts

Periodical: Zhur. prikl. khim., 28, no.2, 175-184, 1955

Abstract : Experiments with unsaturated hydrocarbons, (naphthalene, benzene, and tetralin) in the presence of 18 hydrogenation catalysts at temperatures of 420-450°C and pressures of 180-220 atm. are described. The catalysts consisted of oxides and sulfides of metals of the groups 4,5,6, and 8 of the periodic system. Four tables, 2 diagrams, 12 references (6 Russian: 1937-51).

Institution: Institute of Mineral Fuels of the Academy of Sciences of the USSR

Submitted : Je 18, 1953

V. L. P. S. H. T. Y. N. A. R.

*Vol. Epshteyn A.B.*

AUTHOR: Dyakova, M.K., Vol'-Epshteyn, A.B., Sovetova, L.S. and  
Aleksi, E.A. 65-4-5/12

TITLE: Processing of gas producer tar from cis-Baltic oil shales  
into motor fuel, chemical products and gas. (Pereabotka Gaz-  
ogeneratomoy smoly pribaltiyskikh goryuchikh slantsev na  
motornoye toplivo, khimicheskiye produkty i gas).

PERIODICAL: "Khimiya i Tekhnologiya Topliva i Masel"(Chemistry and  
Technology of Fuels and Lubricants)1957, No.4, pp.28-38 (USSR)

ABSTRACT: Thermal cracking of gas producer shale tar with subsequent  
treatment of the individual fractions was investigated. Two  
schemes for processing tar (Figs. 2 and 3) were developed: I.  
Tar distillation with subsequent cracking of heavy residues to  
coke (with an addition of raw shale as a catalyst) in an inst-  
allation with a solid flowing heat transfer medium; extraction  
of phenols and neutral oxygen containing compounds with meth-  
anol from the distillates boiling up to 320 C, and the purif-  
ication over an industrial tungsten-sulphide catalyst. II. Dis-  
tillation of tar, methanol extraction of the wide fraction  
boiling up to 300 C and followed by hydrogenation. There are  
7 tables, 3 figures and 15 references, 11 of which are Slavic.

Card 1/1

ASSOCIATION: IGI, Ac.Sc. U.S.S.R. (IGI AN SSSR)

AVAILABLE:

*VOL'-EPSHTEYN*

D'YAKOVA, M.K.; VOL'-EPSHTEYN, A.B.; ALEKSI, Ye.A.; VASIL'CHIKOVA, Ye.I.

Developing a hydrogenation purification process at reduced hydrogen pressures of gazolines in thermal dissolution and semicoking of Estonian shale. Zhur.prikl.khim., 30 no.7:1056-1065 J1 '57. (MIRA 10:10)

(Estonia--Oil shales)

*VOL' - EPSHTEYN, A. B.*

65-2-11/12

**AUTHORS:** D'yakova, M. K. and Vol' - Epshteyn, A. B.  
**TITLE:** Thermal Solution of Enriched Estonian Oil Shales.  
(Termicheskoye rastvoreniye estonskikh obogashchennykh slantsev).  
**PERIODICAL:** Khimiya i Tekhnologiya Topliv i Masel, 1958, Nr.2.  
pp. 62 - 67. (USSR).  
**ABSTRACT:** Results of investigations on the dissolving Estonian enriched shales by heat, in combination with and the distillation of the resulting slurries to coke are given. The properties of the raw material and the solvents are shown in Tables 1 and 2. The process was carried out in 0.5 and 18 litre autoclaves (provided with an agitator) during 6 - 20 minutes at a temperature of 400 - 440°C. The 0.5 litre autoclave was heated for 60 minutes and the 18 litre autoclave for 80 - 90 minutes. The liquid products, with a boiling point above 275°C, were separated from the undissolved shale and from its mineral part by distillation. The latter part of the process was carried out in a 0.5 litre copper retort until all the liquid products were separated, and on a continuous laboratory device built according to the design of E. E. Lider and N. S. Pechur. The method has previously been described by M. K. Dyakova et al (Ref.5). The diameter of the reactor was 50 mm

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65-2-11/12

## Thermal Solution of Enriched Estonian Oil Shales.

and the most effective volume about 300 cm<sup>3</sup>. The temperature was 440 - 450°C. Yields of end products are given in Table 4. The optimum temperature was shown to depend on the relation between the gasoline and diesel oil fraction in the starting material, and was found to be between 400 - 440°C. Fig.1 shows the influence of the temperature when processing shale with an ash content of 23.56%. The temperature should not be increased above 425 - 430°C because the yield of the liquid products decreases, and also because it is impossible to regenerate the solvent. The shale slurry was processed by contact distillation in a current of circulating gas. It was found that a maximum yield of liquid products could be obtained at temperatures between 425 - 450°C. If the temperature is increased to 490°C the output of the oil is slightly decreased as well as the coke formation, and considerably more gas is produced. If a circulating gas is present the output of the oil is increased at a higher rate because the liquid products are eliminated from the high temperature zones. A considerable decrease in the degree of separation of the oil occurs (from 85.2% to 78.4%) if no circulating gas is present. A

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## Thermal Solution of Enriched Estonian Oil Shales. 65-2-11/12

comparison of the properties of heavy oils, separated from the slurries by filtration, with the properties of oils obtained by processing the slurries in apparatus with hard, agitated heat carriers, shows that they have a very low specific weight (0.9699 against 1.0570), considerably lower viscosity (20.8 against 29.39 centistokes at 40°C), and contain more carbon and hydrogen (C = 84.07%, H = 10.08% against C = 83.38% and H = 9.46%). The optimum separation of liquid products from the slurry in the form of oil (86.7%) occurs when the temperature = 430°C, a volumar velocity = 3 kg/litre and 1 kg of raw material is fed in 24 kg of heat carrier and 129 litre of circulating gas. Results of the above experiments, and data given by VNIIPS (Ref.6) on the methanol extraction and the hydrogenation purification of the distilled fractions (Ref.7) have made it possible to evolve a new method for the processing of Estonian enriched shales to motor fuels, chemical products and gases (Fig.2). The enriched shale is mixed with a regenerated paste-forming agent in a ratio 1:1.15/weight. The paste is heated in a tubular furnace and enters the reactor where the temperature is 425 - 430°C and the pressure 25 - 30 atms; the reaction time is 15 minutes. The separated slurry is then further processed at a

Card 3/5

Thermal Solution of Enriched Estonian Oil Shales. 65-2-11/12

temperature of 430 - 450°C and a volume velocity of about 2 kg/litre for one hour. The liquid products obtained by processing the slurry and the liquid products drawn off from the top of the evaporator are distilled. The precipitated semi-coke is used for the initial heating of the heat carrier. Oxygen-containing compounds are separated from the distilled fraction (bp = 350°C) with 95% methanol. The extract is separated into phenols and neutral oxygen-containing compounds with an aqueous solution of alkali, and the phenols separated subsequently from the phenolates. Desulphurised, stable petrol with improved octane number is obtained under the following conditions from the fraction of the raffinate (boiling up to 200°C) by purifying it by hydrogenation: pressure = 100 atms., first reactor catalyst  $WS_2 + NiS + Al_2O_3$ , temperature = 350°C; second reactor catalyst  $WS_2$ , temperature = 400°C, volume velocity = 1.5 l/l/hr while supplying 1400 litre of hydrogen to 1 kg of raw material. The hydrogenation purification of the diesel oil fraction (with bp = 300 - 350°C) is carried out under analogous conditions, but in the second reactor the temperature is 380°C. The

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Thermal Solution of Enriched Estonian Oil Shales. 65-2-11/12

following products are obtained after washing with alkali and distillation: motor fuel A-70 (octane number with 1.5 ml, P-9 to 1 kg of benzene = 70; sulphur content 0.08%), and fuel for high speed diesel engines (cetane number 50, sulphur content 0.09%, viscosity at 20°C = 4.0 centistokes, solidification point = -23°C and flash point = 77°C). The total yield of products obtained from enriched shale with a mineral content of 11.22% is as follows: - motor fuel A-70 = 19.6%, diesel fuel DL = 18.8%, phenols (bp 180 - 350°C) = 5.8%, neutral oxygen-containing compounds 5.5%, gas (calorific value 5,900 Cal/nm<sup>3</sup>) = 17.2%, organic matters of semi-coke (containing about 30% of mineral matter in the semi-coke) 27.2% and consumption of hydrogen = .34%. There are 2 Figures, 6 Tables and 7 Russian References.

AVAILABLE: Library of Congress.

Card 5/5

VOL'-EPSHTHYN, A.B.

Effect of the mineral part of Baltic oil shales on the transformation of their organic matter during the thermal dissolution and consecutive distillation to coke of process slurries.  
Trudy IGI 9:181-188 '59. (MIRA 13:1)  
(Oil shales) (Liquid fuels)

VOL'-EPSHTEYN A. B.

VOL'-EPSHTEYN

ИССЛЕДОВАНИЕ СТРУКТУРЫ  
ВЫСОКОКИПЯЩИХ ФЕНОЛОВ  
СРЕДНЕТЕМПЕРАТУРНОЙ СМОЛЫ ЧЕРЕМХОВСКИХ  
УГЛЕЙ И ЕЕ ЖИДКОФАЗНОГО ГИДРОГЕНИЗАТА  
И ГИДРОГЕНИЗАЦИОННОЙ ПЕРЕРАБОТКА ИХ  
НА ЦЕПНЫЕ НИЗШИЕ ФЕНОЛЫ

М. В. Давыдов, Л. В. Вадв. Вадв. Вадв.,  
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Abstracts of reports scheduled to be presented at above mentioned congress,  
Moscow, 13 March 1979.

VOL' EPSHTYEN, A.B., kand.tekhn.nauk

Improving the production of synthetic phenol. Vest. AN SSSR 32  
no.2:49-50 F '62. (MIRA 15:2)

(Phenols)

VOL'-EPSHTEYN, A.B.; ZHAROVA, M.N.; SUROVTSEVA, V.V.

Processing of phenolic resin obtained in the production of phenol via cumene. Khim.prom. no.2:88-93 F '62. (MIRA 15:2)

1. Institut goryuchikh iskopayemykh AN SSSR.  
(Phenols) (Cumene)  
(Hydrogenation)

VOL'-EPSHTEYN, A. B.; ZHAROVA, M. N.; SUROVTSEVA, V. V.

Hydrogenation of individual compounds of phenol oil formed  
in the synthesis of phenol by the cumene method. Trudy IGI 17:  
262-268 '62. (MIRA 15:10)

(Phenol) (Hydrogenation)

VOL' - EPSHTEYN, A. B.; GRIGOR'YEV, S. M.; KRICHKO, A. A.; KONYASHINA,  
R. A.; SURÖVTSEVA, V. V.; YULIN, M. K.

Production of aromatic hydrocarbons from pyrolysis tar of hydro-  
carbon gases by hydrogenation. Trudy IGI 17:269-277 '62.

(MIRA 15:10)

(Hydrocarbons) (Coal-tar products)  
(Hydrogenation)

S/080/63/036/002/017/019  
D403/D307AUTHORS: ~~Vol'-Epshteyn, A. B.~~, Lifshits, B. R. and Surovtseva,  
V. V.TITLE: Hydrogenation of a phenolic resin obtained during the  
preparation of diphenylolpropane

PERIODICAL: Zhurnal prikladnoy khimii, v.36, no. 2, 1963, 456-459

TEXT: 2,2-(2-hydroxyphenyl), (4-hydroxyphenyl)propane, 2,4-( , -  
dimethyl-4-hydroxyphenyl)-phenol and 4,4'-hydroxyphenyl-2,2,4-tri-  
methylchroman form during the preparation of 2,2-di-4-hydroxyphe-  
nyl-propane (I) from phenol and acetone. The authors showed earlier  
that the bond between the quaternary carbon and the benzene ring  
is made susceptible to hydrogenation owing to the para-hydroxyl  
group, giving phenol and p-iso-propylphenol. In the present work  
the authors hydrogenated the phenolic resin, (formed during the  
preparation of I in presence of  $H_2SO_4$ ) over an Al-Co-Mo catalyst,  
at 310 - 360°C, in an autoclave with initial  $H_2$ -pressure of 40 atm.,

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Hydrogenation of a ...

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obtaining ~30% yields (each) of phenol and p-iso-propylphenol at ~325°C. Some ortho isomer was probably also present in the latter compound. There are 2 figures and 1 table.

ASSOCIATION: Institut goryuchikh iskopayemykh (Institute of Fuel Minerals)

SUBMITTED: October 19, 1961

Card 2/2

VOL'-EPSHTEYN, A.B.; ZAERYANSKIY, Ye.I.; KRICHKO, A.A.; LESOKHINA, G.F.;  
MALYAVINSKIY, L.V.; MUKHINA, T.N.; ROBERT, Yu.A.

Production and motor properties of gasolines from pyrolysis  
products. Khim. i tekhn. topl. i masel 9 no.5:23-29 5 My'64  
(MIRA 17:7)

1. Institut goryuchikh iskopayemykh AN SSSR, Vsesoyuznyy nauchno-  
issledovatel'skiy institut po pererabotke nefti i gaza i polu-  
cheniyu iskusstvennogo zhidkogo topliva i Nauchno-issledovatel'-  
skiy institut sinteticheskogo spirta.

ACCESSION NR: AP4036979

S/0065/64/000/005/0023/0029

AUTHOR: Vol'-Epshteyn, A. B.; Zabryanskiy, Ye. I.; Krichko, A. A.; Lesokhina, G. F.; Malyavinskiy, L. V.; Mukhina, T. N.; Robert, Yu. A.

TITLE: Production and motor properties of gasolines from pyrolysis products

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 5, 1964, 23-29

TOPIC TAGS: gasoline, production, motor property, octane number, pyrolysis resin, pyrocondensate, low pressure hydrogenation, high octane gasoline, aluminum cobalt molybdenum catalyst, monoolefin, antidetonation property, octane rating

ABSTRACT: Conditions were developed for the low pressure hydrogenation of fractions of pyrolysis resins and pyrocondensates to obtain high octane gasolines. Pyrolysis resins of the ethylene system and pyrocondensates of the butylene-divinyl system, boiling up to 200 C, were hydrogenated at 10-40 atmospheres at a space velocity of 1.6-8.5 hr<sup>-1</sup> in the presence of a technical aluminum-cobalt-molybdenum catalyst using a hydrogen:crude oil volume ratio of 500-800:1. In the hydrogenation of the pyrolysis resins at 40 atm. from 225-300C it was found that 235C was optimum: 75% of the dienes were hydrogenated to monoolefins; at higher temperatures the

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higher octane number monoolefins were hydrogenated to saturated hydrocarbons. The octane ratings were obtained on 1 cylinder test units IT9-2 and IT9-6 and auto engines MZMA-407. Changing the depth of hydrogenation of the unsaturated hydrocarbons of the highly aromatic distillates of these pyrolysis resins had little effect on the antidetonation properties of the gasolines; these had octane numbers of 86-96 by the motor method and 99-110 by the test unit method. Increasing the depth of hydrogenation of the unsaturated hydrocarbons of gasoline from pyrocondensates having a lower aromatic hydrocarbon content somewhat lowered its antidetonation properties; the octane number was lowered from 78.5 to 75.0 upon complete hydrogenation. It was shown that hydrogenated gasolines from pyrolysis resins of gaseous and liquid hydrocarbons can be used as highoctane components in the production of automobile gasolines. Gasolines A-66 (e.g., from commercial A-56 / 20% hydrogenated gasolines), A-72 (commercial A-66 / 30% hydrogenated gasolines) and A-80 (commercial A-72 / 45% hydrogenated gasolines) have higher antidetonation properties than commercial gasolines bearing these designations. Orig. art. has: 5 tables and 2 figures.

ASSOCIATION: IOI, VNII NP, NIIS

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DATE ACQ: 05Jun64

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SUB CODE: FP

NO REF SOV: 005

OTHER: 004

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